Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method for growing pluripotent stem cells which exhibit a normal karyotype comprising contacting said pluripotent stem cells with a liquid medium and growing said pluripotent stem cells in said liquid medium in a dispersed state in a culturing vessel without using feeder cells, wherein said pluripotent stem cells maintain ~~while maintaining~~ their undifferentiated state and pluripotency, ~~in a liquid medium and a~~ said culturing vessel including immobilized or coated on a substrate solid phase surface a cadherin molecule, and wherein said pluripotent stem cells achieve cell counts at least about two times greater than said pluripotent stem cells cultured on a gelatin plate after four days ~~which is adhesive to said pluripotent stem cells, without using feeder cells~~.

2. (Withdrawn) The method of claim 1, wherein said growing step is followed by transferring a gene into said pluripotent stem cells.

3. (Cancelled)

4. (Cancelled)

5. (Currently amended) The method of claim 1 ~~claim 4~~, wherein said cadherin molecule ~~belonging to the cadherin family~~ is E-cadherin, or a molecule which has structural homology with said molecule, which comprises the EC1 domain and one or more domains from among the EC2 domain, EC3 domain, EC4 domain and EC5 domain of E-cadherin, and which has homophilic binding ability with said pluripotent stem cells.

6. (Currently amended) The method of claim 5, wherein said E-cadherin is mammalian ~~obtained from a mammal~~.

7. (Currently amended) The method of claim 6, wherein said E-cadherin is ~~obtained from a~~ human or mouse.

8. (Currently amended) The method of claim 1, wherein said cadherin molecule ~~the molecule which is adhesive to said pluripotent stem cells~~ is fused with an immunoglobulin Fc region and is immobilized on said substrate solid phase surface *via* said Fc region.

9. (Previously Presented) The method of claim 1, wherein said pluripotent stem cells are mammalian embryonic stem cells (ES cells) or embryonic germ cells (EG cells).

10. (Cancelled)

11. (Withdrawn) The method of claim 2, wherein the molecule which is adhesive to said pluripotent stem cells is either a molecule that is expressed by said pluripotent stem cells or a molecule that is structurally homologous with said molecule and has homophilic binding ability with said pluripotent stem cells.

12. (Withdrawn) The method of claim 11, wherein the molecule which is adhesive to said pluripotent stem cells is a molecule belonging to the cadherin family.

13. (Withdrawn) The method of claim 12, wherein said molecule belonging to the cadherin family is E-cadherin, or a molecule which has structural homology with said molecule, which comprises the EC1 domain and one or more domains from among the EC2 domain, EC3 domain, EC4 domain and EC5 domain of E-cadherin, and which has homophilic binding ability with said pluripotent stem cells.

14. (Withdrawn) The method of claim 13, wherein said E-cadherin is obtained from a mammal.

15. (Withdrawn) The method of claim 14, wherein said E-cadherin is obtained from a human or mouse.

16. (Withdrawn) The method of claim 2, wherein the molecule which is adhesive to said pluripotent stem cells is fused with an immunoglobulin Fc region and is immobilized on said substrate solid phase surface *via* said Fc region.

17. (Withdrawn) The method of claim 2, wherein said pluripotent stem cells are mammalian embryonic stem cells (ES cells) or embryonic germ cells (EG cells).

18. (Withdrawn) The method of claim 2, wherein the molecule which is adhesive to said pluripotent stem cells is E-cadherin obtained from a human or mouse and said pluripotent stem cells are mammalian embryonic stem cells (ES cells).

19. (Cancelled)

20. (Cancelled)